



# CENTER FOR BIOLOGICAL DIVERSITY

BECAUSE LIFE IS GOOD.

January 31, 2006

Submitted by email to Cortero, Liza [LCortero@CALEPA.ca.gov] (with permission)

Alan C. Lloyd, Ph.D.  
Secretary  
California Environmental Protection Agency  
1001 I Street, P.O. Box 2815  
Sacramento, CA 95812-2815

Re: Draft Climate Action Team Report to the Governor and Legislature

Dear Dr. Lloyd,

I am writing on behalf of the Center for Biological Diversity ("Center"), a non-profit organization with over 18,000 members and offices in California, Oregon, Arizona, New Mexico, and Washington, D.C., to provide our comments on the Draft Climate Action Team Report to the Governor and Legislature. The Center is dedicated to protecting imperiled species and their habitats by combining scientific research, public organizing, and advocacy. The primary goal of the Center's Climate, Air, and Energy Program is to reduce United States greenhouse gases and other harmful air pollutants in order to protect biological diversity, public health, and the environment.

Global warming is one of the foremost problems California and the nation face today and implicates all aspects of society, including environmental health and biodiversity, public health, the stability of our economy, and national security. The Center applauds the California Climate Action Team ("CAT") and the State of California on its greenhouse gas reduction initiatives, and in particular on its goal of 80% greenhouse gas emissions reductions below 1990 levels. While the Center believes that 80% reductions need to be achieved before 2050, we commend the CAT for its vision and for taking the critical first steps toward this goal.

The Center supports the Draft Climate Action Team Report to the Governor and Legislature ("Draft Report") and we encourage the Governor and Legislature to implement the plan immediately. Our comments focus on ways in which the greenhouse gas reduction strategies can be accomplished with the highest level of environmental co-benefits, in particular for imperiled species. Because California's biological diversity is profoundly threatened by global warming, it is essential that California reduce greenhouse gas emissions as rapidly as possible in a way that maximizes benefits and minimizes harm to imperiled species.

## The Impact of Global Warming on Imperiled Species and Biological Diversity

Global warming is undeniably one of the greatest threats to biodiversity worldwide. This month, a study published in the preeminent scientific journal *Nature* linked the extinction of dozens of Tucson • Silver City • San Francisco • San Diego • Portland • Phoenix • Joshua Tree • Washington, DC

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amphibian species in Central and South America to global warming. The study shows how climate change has contributed to ideal conditions for growth of the chytrid fungus, a disease which kills frogs by growing on their skin and attacking their epidermis and teeth, as well as by releasing a toxin (Pounds et al. 2006). Seventy-four of the 110 species of brightly colored harlequin frogs of the genus *Atelopus* have disappeared in the past 20 years due to the spread of the fungus (Pounds et al. 2006). The significance of the study is that global warming is not some future theoretical threat to the Earth's biodiversity, but rather is *already* responsible for one of the largest vertebrate extinction events in the past 100 years. Harlequin frogs may be among the first modern extinctions linked to global warming, but unfortunately, absent major reductions in greenhouse gas emissions they will not be the last.

Thomas et al. (2004) have estimated that up to one third of the species included in a study of 20% of the world's surface area may be committed to extinction because of global warming by the year 2050. This study was based on minimum, mid-range, and maximum warming IPCC (2001) scenarios (Thomas et al. 2004). Under the minimal climate-warming scenario, about 18% of species would be committed to extinction, while under the mid-range scenario about 24% of species would be committed to extinction, and under the maximum warming scenario about 35% of species would be committed to extinction (Thomas et al. 2004). Reducing greenhouse gas emissions will allow total warming to be kept to the low end of the range, thereby preventing many thousands of species extinctions (Thomas et al. 2004).

Global warming's impacts on United States species already listed as threatened and endangered have been documented. The endangered Quino checkerspot butterfly (*Euphydryas editha quino*) which occurs in southern California and Baja, Mexico is threatened by the significant warming and drying of its habitat from global warming (Parmesan and Galbraith 2004). The drying and warming is causing the species' host plant to die off and dry up prior to the completion of caterpillar growth, resulting in mass starvation of young caterpillars (Parmesan and Galbraith 2004).

Two other listed species of *Euphydryas* butterflies, the Bay checkerspot and Taylor's checkerspot, are also impacted by global warming (Parmesan and Galbraith 2004). When species cannot shift their ranges northward or to increased elevations in response to climate warming, they will become extinct (Parmesan and Galbraith 2004).

Two species of Caribbean coral, the elkhorn coral (*Acropora palmata*) and staghorn coral (*Acropora cervicornis*) have been proposed for listing as threatened species, in part due to global warming and increased carbon dioxide concentrations. 70 Fed. Reg. 24359. Sustained increased ocean temperatures cause these coral to expel symbiotic algae on which they depend for photosynthesis and energy, the deadly phenomenon known as "coral bleaching." 70 Fed. Reg. 24362. In addition, increased levels of dissolved carbon dioxide in surface seawater acidifies the oceans and decreases the ability of these corals to calcify. 70 Fed. Reg. 24363.

Other species such as the polar bear are directly threatened with extinction by global warming but not yet proposed for listing under the Endangered Species Act. The Center for Biological Diversity, NRDC, and Greenpeace have submitted a Petition to the U.S. Fish and Wildlife Service to list polar bears under the Endangered Species Act, initiating the listing process. Polar bears are completely dependent upon Arctic sea-ice habitat for survival. Polar bears need sea ice as a platform from which to hunt their primary prey (ringed seals, *Phoca hispida*), to make seasonal migrations between the sea ice

and their terrestrial denning areas, and for other essential behaviors such as mating. The polar bear's sea-ice habitat is melting away due to global warming, and the Arctic may be ice-free in the summer well before the end of this century (Overpeck et al. 2005). Polar bears cannot be expected to survive the near complete loss of their sea-ice habitat.

Because California's and the world's biological diversity is so profoundly threatened by global warming, it is essential that California reduce greenhouse gas emissions as rapidly as possible, yet also do so in a way that maximizes benefits and minimizes harm to imperiled species.

### Forestry

We are concerned by the Draft Report's statement regarding the current regulation of forest management:

The regulatory framework for timber harvesting requires landowners to secure permits from a large number of agencies to meet the requirements of the Forest Practice Act, Endangered Species Act, and Clean Water Act. Together the time and cost of obtaining these permits have led to conversions of timberlands to other uses and made it more difficult and time consuming to implement forest management activities that would increase carbon storage. Simplification of the permitting process for forest management and timber harvesting would result in additional carbon being stored over a larger number of acres (Draft Report at 48).

The Center disagrees strongly with this premise, which ignores the forestry project certification process and the concept of additionality. Under the California Climate Action Registry's Forest Project Protocol, projects only receive certification for carbon reduction strategies that are in addition to actions already required under existing law (CCAR 2005). Simplifying or reducing forestry regulatory requirements and reducing forest conservation requirements would have the perverse result of creating fewer carbon reduction strategies. This is because it would allow certification of measures previously required under existing law as carbon-reduction strategies rather than requiring new carbon reduction actions. Relaxing the requirements of existing laws and therefore relaxing the additionality requirements for forestry projects will not lead to greater carbon reductions – it will simply allow timber companies to obtain carbon credits for actions they would have otherwise been required to undertake in the first instance.

The Draft Report asserts that the time and cost of obtaining forestry permits has caused the conversion of timberlands to other uses, without balancing this asserted impact with the fact that existing laws and regulations also encourage forest conservation. Moreover, many of the same laws and regulations which apply to timber harvest apply to other land uses as well, such as residential, commercial, and agricultural development. We disagree with the notion that "simplifying" the permitting process under the Forest Practice Act, Endangered Species Act, and Clean Water Act would encourage additional greenhouse gas reductions. We believe that the opposite is true. Furthermore, carbon reduction strategies taken in concert with the requirements of these laws will maximize co-benefits to imperiled species and their habitats, watersheds and water quality, and other resources. Maximizing these co-benefits for all Californians is far more important than maximizing the profits of the timber harvest or other industries.

The Center strongly supports forest conservation, forest management, urban forestry, and afforestation and reforestation projects to obtain carbon reduction benefits. However, these measures should always be taken in a way that maximizes the environmental co-benefits. For example, the Center strongly supports the Urban Forestry component of the Draft Report. Planting 5 million trees in urban areas by 2020 would have significant carbon reduction benefits, and could have significant additional co-benefits including increasing shade and reducing energy requirements, benefiting native species, and increasing the aesthetics and quality of life in urban areas.

#### Smart Land Use and Intelligent Transportation

The importance of improving land-use planning in California to help meet the 80% greenhouse gas reduction goal cannot be overstated. The Center supports all the strategies articulated by the draft plan, which include “ensuring jobs/housing proximity, promoting transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal planning.”

The Center encourages the CAT to move forward quickly with actual implementation of these strategies, as the continued explosion of energy-intensive sprawl development in California will undermine the overall success of the plan. The Center suggests that the Resources Agency and other CAT members use the existing California Environmental Quality Act (“CEQA”) process to immediately improve implementation of these strategies in new development. While CEQA already requires that all of a project’s significant environmental impacts be disclosed, analyzed, avoided, and mitigated, the vast majority of jurisdictions are not requiring adequate treatment of projects’ greenhouse gas emissions and global warming impacts.

Guidance from the Resources Agency or other agencies could clarify the importance of discussing a project’s energy use and greenhouse gas emissions under CEQA, and establish standardized methods of calculating the energy requirements of residential and commercial buildings, vehicle trips, the embodied energy of building materials, and other uses. The guidance should highlight the importance of conducting meaningful alternatives analyses to reduce impacts. For example, a 1000 unit, single family home, sprawl style development could greatly increase its impacts by opting for the same number of units in a dense, urban-renewal style setting. Transportation infrastructure projects that would increase capacity on the roadways for single occupant cars could be converted to projects to improve public transportation.

Once all alternatives have been considered and adopted where possible, the guidance should specify standard mitigation measures. For example, all new construction where the use of solar panels is technologically feasible should be including solar panels as a mitigation measure under CEQA, yet very few actually do so. The guidance should specify that alternative energy sources like solar panels and wind turbines must be incorporated into new construction wherever feasible. Similarly, new construction should include electric vehicle charging stations and hydrogen fueling stations as appropriate. New construction project proponents should be required to purchase carbon credits to

offset their projects' remaining greenhouse gas emissions once all measures to avoid, minimize, and mitigate those emissions have been incorporated.

The adoption of statewide guidance would greatly benefit California by accelerating local agencies' and project proponents' incorporation of these measures. Statewide guidance would also help avert the need for project-specific litigation which now appears necessary to achieve compliance with CEQA's requirements in the area of greenhouse gas emissions and energy use.

We also encourage the Governor and Legislature to carefully consider the Governor's Strategic Growth Plan in connection with the Draft Report. Measures in the Strategic Growth Plan that would increase California's greenhouse gas emissions should be altered in favor of measures that would contribute to greenhouse gas reductions. For example, the 10-year need for new highways is projected at \$53 billion, while the 10-year need for new transit and rail is only \$4.5 billion. This ratio must be reversed if California is to move expeditiously towards its goal of 80% greenhouse gas emissions. Increasing the spending on new transit and rail is also one of the most important steps towards improving the quality of life for all Californians.

### Wind Power

The Center strongly supports the accelerated renewable portfolio standard ("RPS") of 33 percent renewables by 2020. The Center also strongly supports windpower, which is expected to provide approximately 50% of the total renewable energy supply and thus be the largest component of RPS. Windpower, however, can result in high levels bird and bat fatalities, and may pose a risk to other wildlife as well. As the number of wind turbines grows exponentially, the individual and cumulative wildlife impacts will become of even greater concern. Bird and bat fatalities may lead to conflict with laws including but not limited to the Migratory Bird Treaty Act, federal Endangered Species Act, California Endangered Species Act, and California Environmental Quality Act. Understanding and resolving bird and bat impacts was the topic of a recent conference co-sponsored by the American Wind Energy Association and the Audubon Society. The minutes of this conference will be posted at [www.audubon-ca.org](http://www.audubon-ca.org) and [www.awea.org](http://www.awea.org).

We urge the CAT to participate in the development of California guidelines for bird and bat safety which incorporate the best available scientific information to reduce these impacts. Once developed, there are a number of different ways that the guidelines could be implemented, including but not limited to incorporation of the guidelines into the CEQA process, the development of regulations requiring compliance with the guidelines, or specifying that the RPS requirements can only be met with windpower from facilities that comply with the guidelines. While the Center has not yet endorsed any one of these approaches, we strongly support the development of guidelines and encourage the CAT to lead or participate in the process. Guidelines will help reduce bird and bat fatalities as well as avoid regulatory conflicts that may hamper the rapid expansion of windpower that is needed in order to achieve 80% greenhouse gas emissions reductions.

### Conclusion

Thank you for the opportunity to comment on the CAT's Draft Action Plan. The Center looks forward to continuing to participate in California's exciting, groundbreaking efforts to address global

warming. Please contact me at (760) 366-2232 x.302 or at the address on this letterhead if you have any question or concerns. Thank you for your consideration of these comments.

Yours Sincerely,



Kassie Siegel

#### Literature Cited

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